

# **“U.S. Army RDECOM/TARDEC Fuel Cell Overview”**

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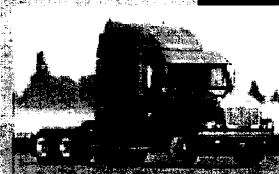
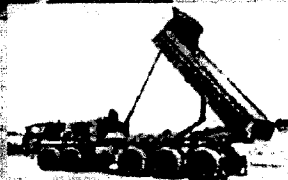
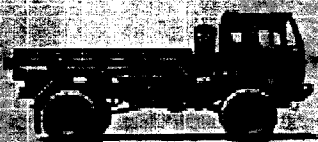
# DUAL NEEDS FOCUS



**COLLABORATIVE  
ENVIRONMENT**

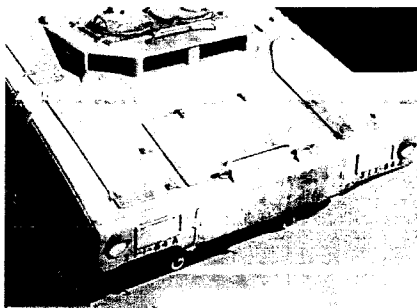
COOPERATIVE AGREEMENTS

COMMON SPECIFICATIONS

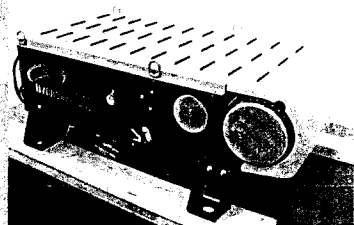


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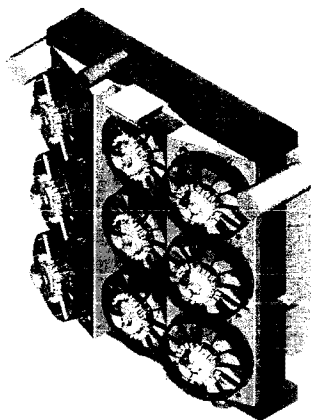
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# Fuel Cell Integrated with Diesel Engine



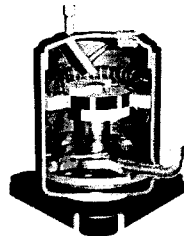
20 Kilowatt  
Fuel Cell APU



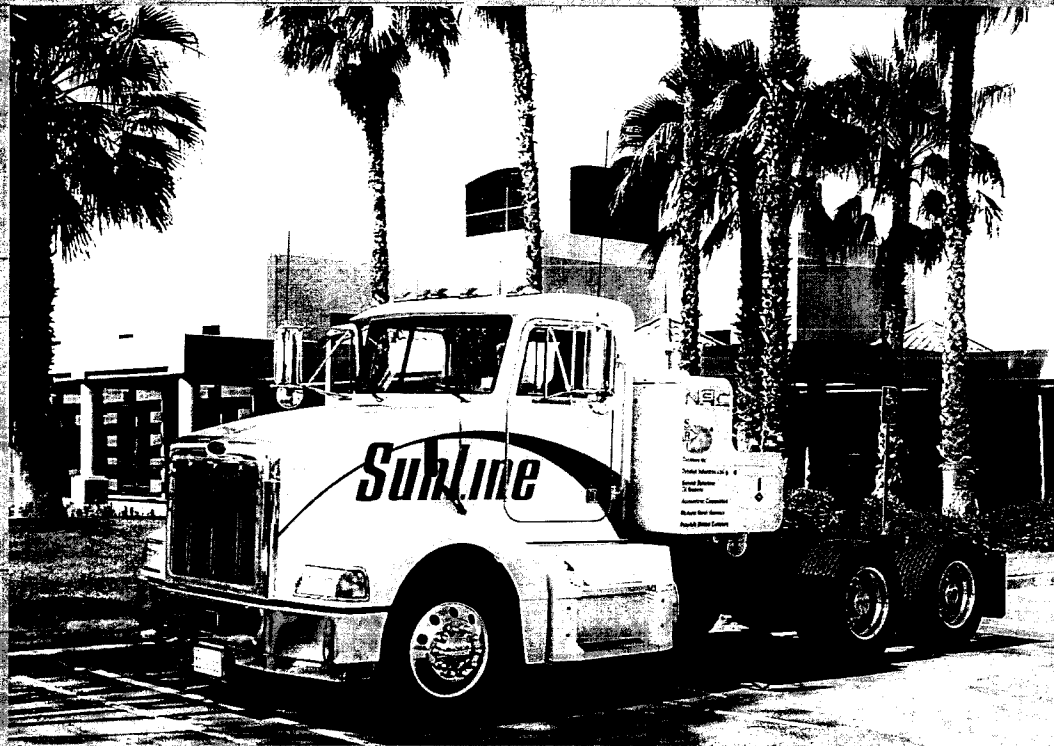
Electric  
Radiator Fans



Electric  
Coolant Pump



Electric  
air  
conditioning  
pump



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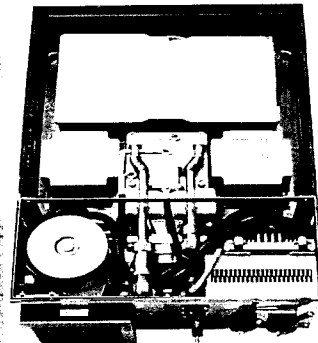
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# Auxiliary Power Unit Programs

SunLine with Southwest Research



Peterbilt test bed tractor

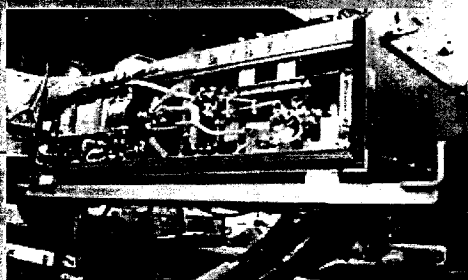


Delphi 5 kW SOFC APU

Ballard / Freightliner/  
University of Alabama



10 kW PEM APU



Methanol fueled APU  
mounted on a class 8 truck  
test platform

HyPM 10

Located at rear of  
vehicle for using  
exportable power



HyLyzer

Located near  
battery box



Hyride



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# GM T-800 Truck at Ft. Belvoir



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# Fuel Cell Strategy Summary

**Emphasis on inter-service, inter-agency cooperation and coordination**

**Fuel cell auxiliary power units (APU)**

**Reforming of JP-8 (jet fuel) single battlefield fuel**

**Demonstrate commercial fuel cell vehicles on military bases**

**Leverage industry to move fuel cells from civilian uses to military vehicles**

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